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By Hand Delivery

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Richard Kroczek	Confirmation No.: 7620
Application No.: 09/509,283	Group Art Unit: 1644
Filed: August 11, 2000	Examiner: J. Roark
For: ANTI-HUMAN COSTIMULATING T-CELL POLYPEPTIDE MONOCLONAL ANTIBODIES	Attorney Docket No.: 7853-215

DECLARATION OF RICHARD KROCZEK UNDER 37 C.F.R. § 1.132

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

I, RICHARD KROCZEK do declare and state:

1. I am the inventor of the invention described and claimed in the above-identified patent application.

2. I presently hold the position of Professor of Molecular Immunology at the Robert Koch Institute, Berlin, Germany, the assignee of the above-identified patent application.

3. In the course of a scientific cooperation with Umberto Dianzani of the University of Eastern Piedmont at Novara, Italy, I was given limited amounts of the hamster monoclonal antibody C398.4A in trust in order to perform the experiments described below in paragraph 4. The experiments described below in paragraph 4 were performed by me or by others under my supervision in order to determine whether the hamster monoclonal antibody C398.4A, raised against murine ICOS and originally described by Redoglia *et al.* (1996, Eur. J. Immunol. 26:2781-2789), blocked the interaction between ICOS and its ligand in a murine system *in vitro*.

The ultimate goal of the experiment was to assess whether the antibody could be used for blocking experiments in mice *in vivo*.

4. The blocking assay was performed as follows: a cell line was transfected with an expression construct for the murine ICOS (muICOS) gene. The cell line was contacted with a soluble murine ICOS ligand-immunoglobulin fusion protein (muICOS ligand-Ig) at a concentration of 2 μg/ml without prior pre-incubation with mAb C398.4A or after pre-incubation with various concentrations of mAb C398.4A. The binding of muICOS ligand-Ig to the muICOS transfected cell line, detected by virtue of the fluorochrome phycoerythrin which had been coupled to the muICOS ligand-Ig, was assayed by flow cytometry.

5. The results of the flow cytometry experiments described in paragraph 4 above are shown Figure 1, attached as Exhibit 1. The data in Figure 1 demonstrate that C398.4A at high concentrations (30 μg/ml or higher) is capable of physically blocking the interaction of murine ICOS with murine ICOS ligand, but is unable to do so at lower concentrations (3 μg/ml or lower).

6. I declare further that all statements made in this Declaration of my own knowledge are true and that all statements made on information and belief are believed to be true and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: October 14, 2002 M. Kroczek

Richard Kroczek

Attachments:

Exhibit 1: FIGURE 1